High Speed Vessel Project

CG, MCCDC

19 August 2003

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Purpose

- Provide Update to MROC on USMC HSV Project
  - MROC Decision Memorandum 34-2003
- Gain MROC concurrence with HSV Project Implementation Strategy

Background

- USMC has been experimenting with High Speed Vessels since Oct 2001
- HSVs have been employed in operations and experimentation by Army, Navy, SOCOM and USMC
- Delivery of HSV 2 SWIFT

Concept Based Requirement

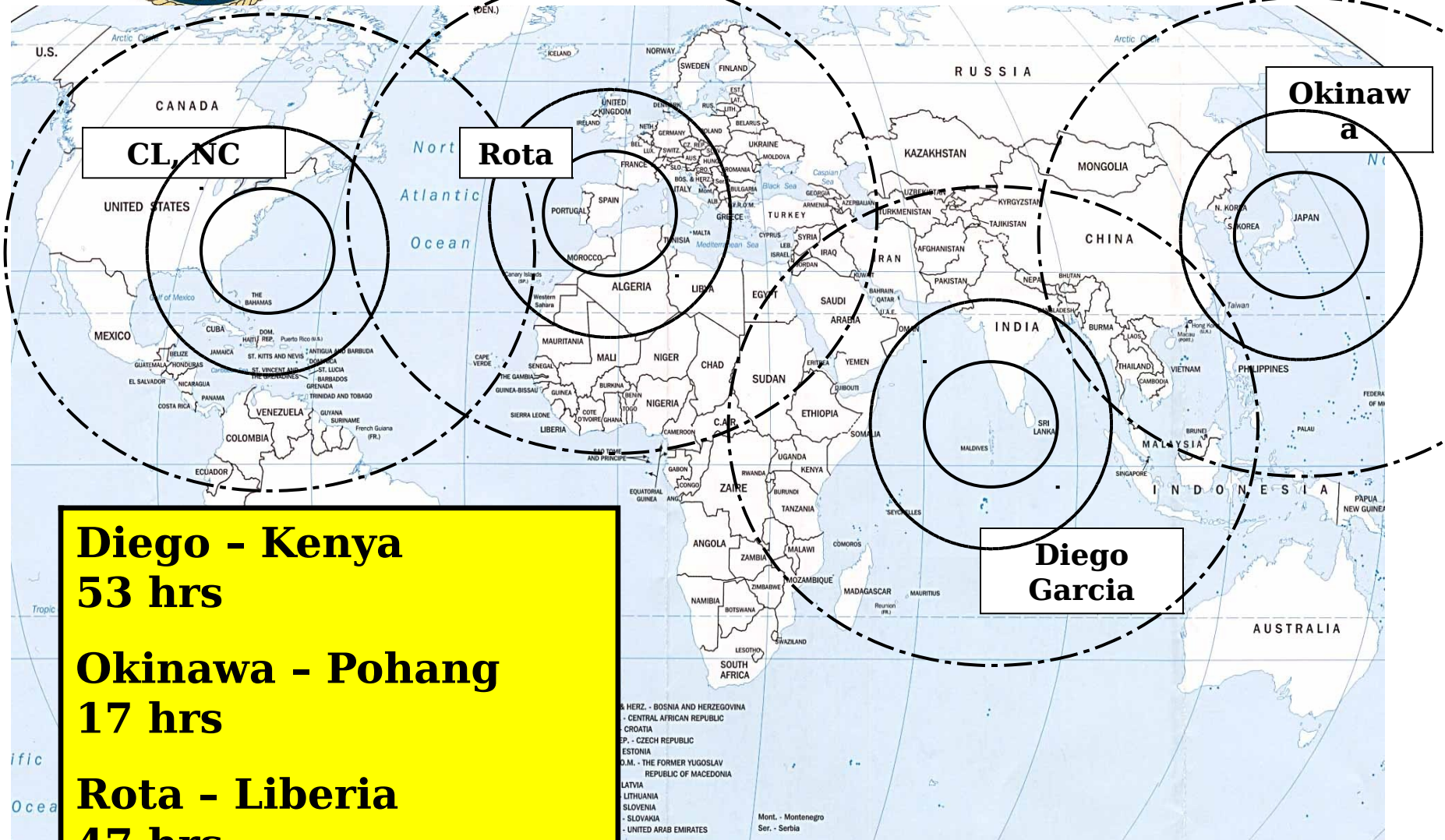
- **Joint Requirements …**
  - Transformation Planning Guidance
  - Quadrennial Defense Review 2001
  - Defense Planning Guidance 04-09
- **USMC Operational Concepts …**
  - Expeditionary Maneuver Warfare
  - Operational Maneuver From the Sea
  - Enhanced Networked Seabasing

Assumptions/Parameters

HSVs Provide …

- **High-Speed … rapid littoral maneuver & force closure**
- **Maneuverability and Access … rapid unassisted ingress and egress enables austere port ops**
- **HSVs fill gaps identified by JFEO Study**
  - Reduce reliance on MV-22
  - Increase throughput and offload options thru austere ports
  - Support Movement within JOA

Assumptions/Parameters



Diego – Kenya
53 hrs

Okinawa – Pohang
17 hrs

Rota – Liberia
47 hrs

Assumptions/Parameters

- **HSVs are <u>not</u> a Replacement for Amphibious Shipping**
  - Lack Endurance and Loitering Capability
  - Lack Forcible Entry Capability
- **HSVs are <u>not</u> a Replacement for MPF shipping**
  - Lack Payload required for Pre-positioning

HSVs Complement and Enhance other Platforms

DoD Experimental HSVs

- JOINT VENTURE (HSV-X1) Picture
- WESTPAC EXPRESS Picture
- SWIFT (HSV-2) Picture
- SPEARHEAD (TSV-1X) Picture

Army Theater Support Vessel

- Army Program of Record to replace LCU-2000s and LSVs
- TSV is similar to the HSV but focused on port-to-port operations
- Army intends to release RFP for US built TSV-2 in Aug 03

Experimentation

- **Worldwide Employment & Experimentation**
  - CENTCOM, EUCOM, PACOM
  - “Around the World” self-deployment (twice)
  - Currently supporting SOF Operations iso JTH HOA

- **Supported Major Exercises**
  - Tri MEF MPF Exercise (Blount Island Command)
  - Battle Griffin-02 (Norway)
  - BALTOPS-02 (Baltic)
  - Millennium Challenge-02 (West Coast)

Experimentation Focus Areas

- MPF – At-sea Arrival & Assembly
  - Selective Offload
  - Causeway & RRDF Interoperability
- Advanced Force Ops/Littoral Maneuver
- MAGTF Operational Maneuver
- Austere Port and Riverine Operations
- HA/DR, NEO, Medical Operations
- High Speed Intra-theater Lift
- Flight Operations

Littoral Combat Ship (LCS)

- LCS is small, surface combatant
- No interoperability with amphibious or MPF shipping
- Limited capability to support operational maneuver or sustainment operations
- LCS and HSV are distinct and separate programs that address different requirements

LCS vs. HSV

	HSV-2	***LCS***
• **Pax Capacity:**	**250**	**25**
• **Deadweight:**	**680 ST**	**180 ST**
• **Draft (max):**	**11 ft.**	**20 ft.**
• **Vehicle Sq:**	**14, 000**	**Not Reqd.**
• **Ramp:**	**70 ton**	**Not Reqd.**

Ref: HSV-2 actual specifications versus LCS Flt 0

Threshold Critical Design Parameters (10 Feb 03)

Funding

- To date, the Army and the Navy have provided the majority of funding for the HSV Project

- The USMC currently has programmed R&D funds to support HSV experimentation
  - FY04: $5.0M
  - FY05: $2.5M

Implementation Strategy

1. **Continue concept-based Experimentation with HSV 2 SWIFT**
   - WATC 04, JLOTS 04, PELILEU ESG Interoperability
   - MCWL designs, executes and conducts assessment of experimentation
2. **Interim USMC HSV Project Office**
   - Coordinate USMC R&D, Experimentation and Concept Development efforts
   - Provide core to transition to Naval HSV Program Office
   - Office Structure: (1) USMC AD, (3) Contractors

Implementation Strategy

3. Establish Naval HSV IPT

- CG MCCDC and N7 Co-Chair IPT
- Develop Naval HSV CONOPS
- Draft requirements documents icw N75, NWDC, and ASN (RD&A)
- Address HSV Resource Requirements

4. Explore Acquisition Options

- Address lack of US industrial base to build HSVs

Recommendations

- **That MROC concur with:**
  - Continued concept based HSV Experimentation
  - Establishment of HSV Project Office
  - Establishment of Naval HSV IPT

BACKUP SLIDES

JOINT VENTURE (HSV-X1)

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WESTPAC EXPRESS

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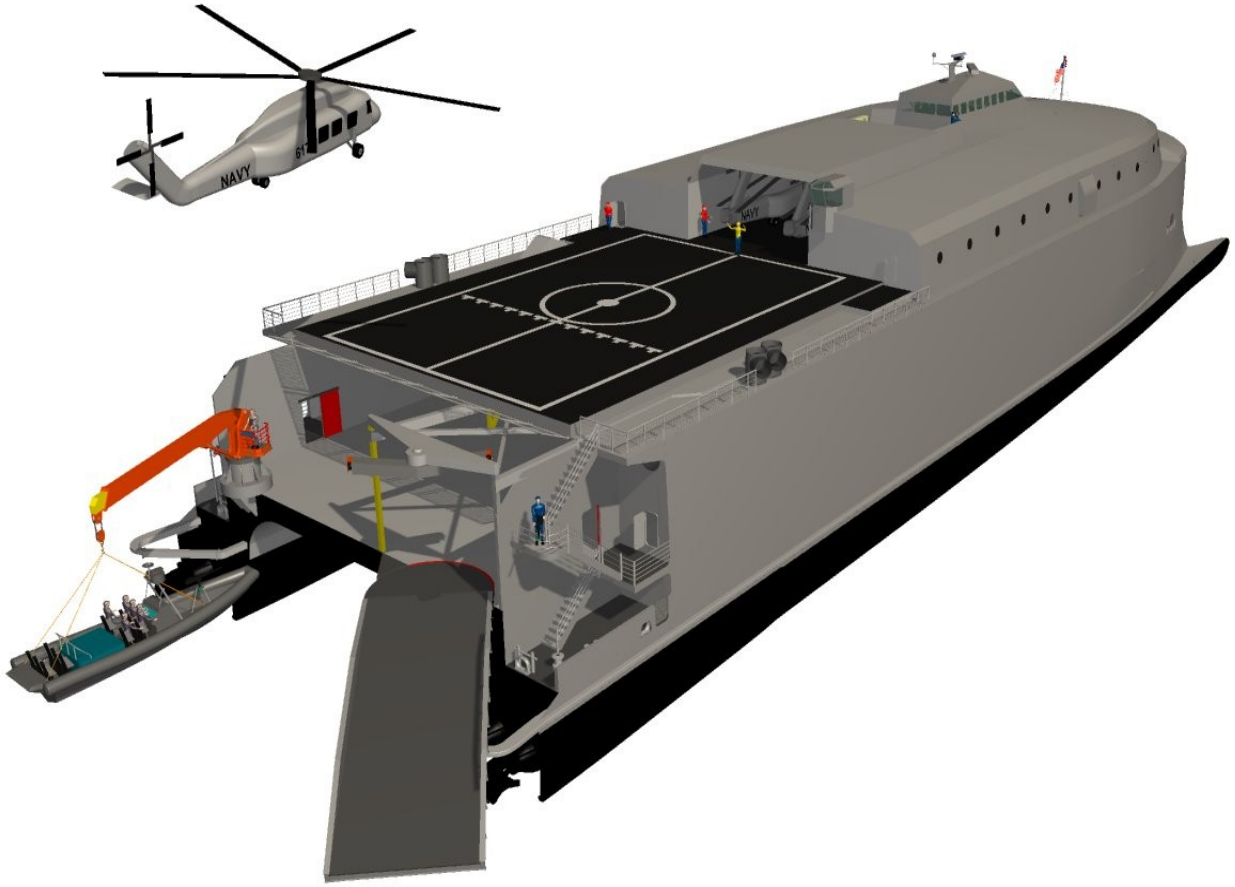
SWIFT (HSV-2)



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SPEARHEAD (TSV-1X)

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Sample HSV Loads

600 Miles in …16 hours

Mechanized TF

- 290 Marines
- 8 AAAVs
- 4 M1A1 MBTs
- 4 LAV-25
- 2 TOW HMMWVs
- 2 HMG HMMWVs
- 5 MRC-145/M998s
- 2 AH-1Z

Mobile CSSD

- 16 MTVRs
- 4 LVSs (Fuel, Water)
- 2 Ambulances
- 2 MRC-145s
- 12 Cargo HMMWVs
- 2 RT-4000
- 2 CH-46/HH-60s

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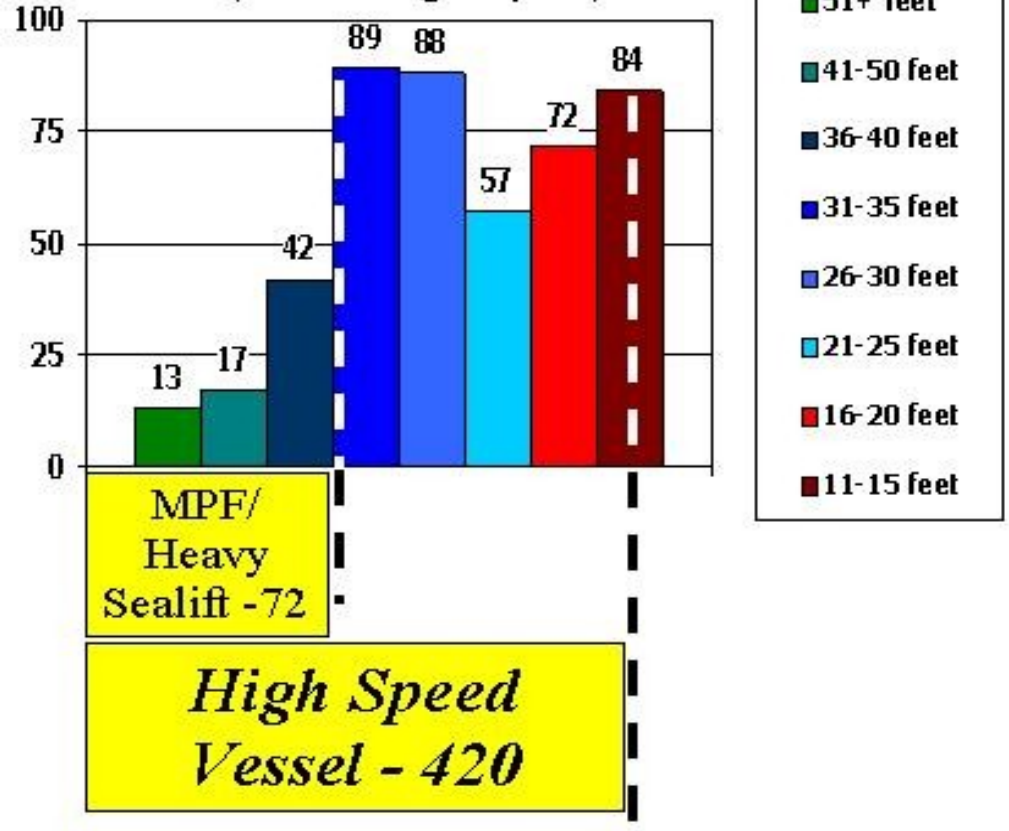
Increased Access

WestPac (excluding Japan)



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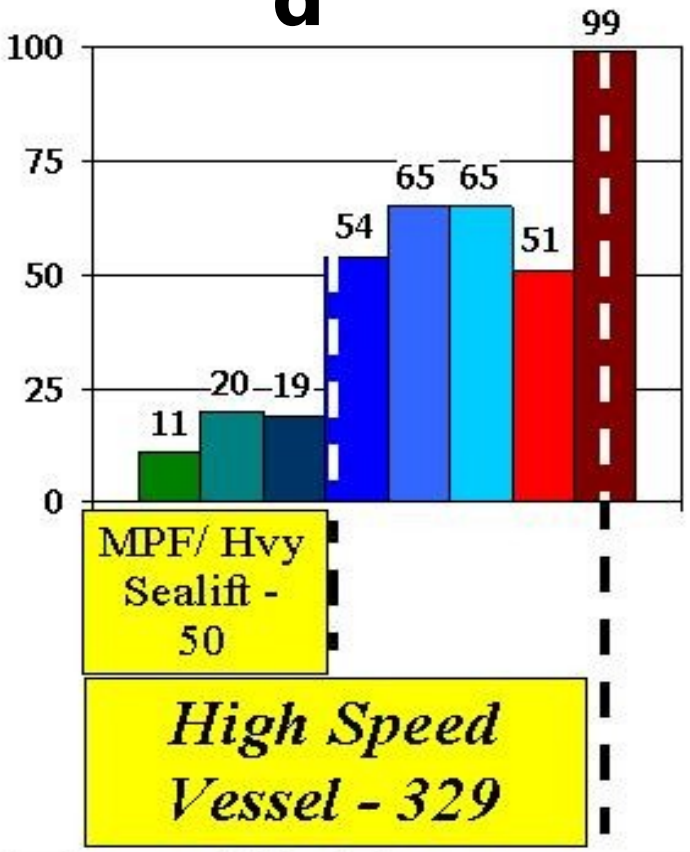

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HSV Office

- Structure:
  - (1) USMC O-5, Project Director
  - (4) Contractors: (3) in Norfolk, (1) in MCCDC
- Tasks
  - Posture USMC for transition to Naval program
  - Develop HSV Concept
  - Plan and Execute USMC Experimentation and R&D Budget
  - Coordinate USMC HSV R&D and Experimentation efforts

Del Mar Boat Basin

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